

F. BIOLOGICAL RESOURCES

This section describes the methods used to assess biological resources in the North Park Street Code area; the regulatory requirements and agency jurisdiction; the vegetation and wildlife resources; the presence or potential presence of special-status species; the presence of potentially jurisdictional wetlands and waters; and the potentially significant impacts to biological and wetland resources as a result of the Code; and measures to mitigate these impacts.

1. SETTING

a. Regulatory Context

Each federal, State, regional, and local agency with jurisdiction over a biological resource is listed below and briefly described.

(1) U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over formally listed threatened and endangered species under the federal Endangered Species Act. This Act protects listed animal species from “take,” which is broadly defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” An activity can be defined as a “take” even if it is unintentional or accidental.¹ Listed plant species are provided more limited protection. In California, an activity on private lands will violate Section 9 of the Federal Endangered Species Act if a federally listed plant species is intentionally removed, damaged, or destroyed.

An endangered species is one that is considered to be in danger of becoming extinct throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered within the foreseeable future. In addition to endangered and threatened species, which are legally protected under the federal Endangered Species Act, the USFWS maintains a list of proposed species and candidate species. Proposed species are those for which a proposed rule to list them as endangered or threatened has been published in the Federal Register. Candidate species are those for which the USFWS has on file sufficient information on biological vulnerability and threats to support proposals to list them as endangered or threatened. Federal candidate species are specifically included on a list published in the Federal Register. Federal candidate species are not afforded legal protection under the Endangered Species Act.

(2) California Department of Fish and Game

The California Department of Fish and Game (CDFG) has jurisdiction over State-listed rare, threatened, and endangered species under the State Endangered Species Act. This Act protects listed plant and animal species from harm or “take.”

¹ Mueller, T.L., Esq., 1994. *Guide to the Federal and California Endangered Species Laws*. Planning and Conservation League Foundation, Sacramento, California.

The State also identifies special-status wildlife on its lists of Species of Special Concern and Fully Protected Species. These species are not afforded legal protection under the State Endangered Species Act. Fully Protected species may not be taken or possessed under any circumstance; therefore, projects must be designed to avoid impacts to these species.

(3) U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (Corps) is responsible for regulating the discharge of fill material into waters of the United States. Waters of the U.S. and their lateral limits are defined in 33 CFR Part 328.3(a), and include streams that are tributary to navigable waters and their adjacent wetlands. The term “adjacent” is interpreted broadly by the Corps and, in some cases, includes wetlands (and other waters) that are not contiguous with other waters of the U.S. Wetlands that are not adjacent to waters of the U.S. are termed “isolated wetlands” and, in some cases, may also be subject to Corps jurisdiction. The regulatory status of isolated wetlands (and other waters) is currently somewhat uncertain, due to a recent Supreme Court decision.² The Regional Water Quality Control Board may assert jurisdiction over such wetlands (and other waters) even if the Corps does not (see below).

In general, a Corps permit must be obtained before placing fill in wetlands or other waters of the U.S. The type of permit depends on the acreage involved, the types of wetlands or other waters, and the purpose of the proposed fill. In many cases, fills of less than 3 acres can be covered by existing Nationwide Permits, which do not require public review, but in some cases require mitigation and review by selected agencies. An Individual Permit is required for projects that result in more than a “minimal” impact on wetlands or other waters. Individual Permits require evidence that wetland impacts have been avoided to the extent possible, and also require that the permits be available for review by the public.

(4) Regional Water Quality Control Board

Pursuant to Section 401 of the Clean Water Act, projects that require Corps Individual Permits and many Nationwide Permits must obtain water quality certification from the Regional Water Quality Control Board (RWQCB). This certification ensures that a project will uphold State water quality standards. The RWQCB may impose mitigation requirements even if the Corps does not. The State Water Resources Control Board also claims that the State retains its independent authority under Porter-Cologne and other statutes, to regulate discharges of waste to waters of the State (including isolated wetlands, even if the Corps doesn’t assert jurisdiction over such areas).³ “Discharge of waste” would include any filling activities.

² SWANCC v. United States, January 9, 2001.

³ Wilson, Craig W., 2001. Chief Counsel, State Water Resources Control Board. Written communication. January 25.

(5) Historic Preservation Act

Pursuant to the City of Alameda's Historic Preservation Ordinance, certain trees in the City of Alameda are protected. Trees that are of concern in the North Park Street Code area are coast live oaks (*Quercus agrifolia*).⁴

c. North Park Street Code Area Existing Conditions

The existing conditions of the North Park Street Code area and vicinity are described below for three categories of biological resources: 1) vegetation and wildlife habitat values; 2) sensitive habitats; and 3) special-status species.

d. Vegetation and Wildlife Habitat Values

The majority of the North Park Street Code area is developed with existing buildings and paved areas. The vegetation in these areas reflects the disturbed conditions. However, introduced trees and shrubs provide shelter, foraging, and nesting habitat for some wildlife species. The open water of the Estuary along the north side of the North Park Street Code area provides habitat for fish and water birds.

(1) Warehouses and Urban-Industrial.

Vegetation in the warehouse and urban-industrial areas is sparse, consisting of a mixture of bare ground, concrete/asphalt, and ruderal vegetation. A few individuals of coyote brush, sweet fennel, and pampas grass may be observed growing in cracks in the pavement and edges of the buildings. Vegetation in this area consists of non-native annual grasses and forbs, which provide a vegetative cover of about 5 percent.

Wildlife observed in the warehouse and urban-industrialized area included rock dove, mourning dove, Anna's hummingbird, and house finch.

(2) Residential.

The residential areas include ornamental species such as acacia, eucalyptus, Monterey pine (*Pinus radiata*), and arbovitae (*Arbovitae* sp.). Native trees include coast live oak and coast redwood (*Sequoia sempervirens*). Wildlife found in these areas were urban adapted species that are commensal with humans and tolerant of human disturbance, such as included rock dove, mourning dove, and house finch.

(3) Waterfront/Shoreline.

⁴ City of Alameda. Municipal Code. Article VII, Historical Preservation 13.21-3 Historical Monuments.

The waterfront portion of the North Park Street Code area consists of the Park Street Landing commercial center and marina, the Bridgeside commercial center, maritime and industrial uses, and a senior housing facility.

The open water of the Estuary in and adjacent to the waterfront/shoreline portion of the North Park Street Code area provides important habitat for wildlife, including several species of fish and birds. Birds observed foraging in the area, along the marinas, or in the open water included western grebe (*Aechmophorus occidentalis*), pied-billed grebe (*Podilymbus podiceps*), double-crested cormorant (*Phalacrocorax auritus*), common goldeneye (*Bucephala clangula*), lesser scaup (*Aythya affinis*), American wigeon (*Anas americana*), American coot (*Fulica americana*), ring-billed gull (*Larus delawarensis*), western gull (*Larus occidentalis*), mew gull (*Larus canus*), and California gull (*Larus californicus*). Rock doves, mourning doves, and Anna's hummingbird have also been observed along the shoreline.

Pilings provide substrate for a suite of species typically associated with such structures. A few red and green algae (seaweed) as well as some invertebrates such as barnacles (*Chthamalus dalli*), mussels (*Mytilus* sp.), and crustaceans (amphipods) inhabit the pilings. Fish species, especially perches, are often conspicuous members of a "piling community."

A substantial amount of riprap lines the shoreline along the northern edge of the plan area. Algae are the predominant plants associated with riprap shorelines in San Francisco Bay. The green alga, sea lettuce (*Ulva lactuca*) and the brown alga, rockweed (*Fucus distichus*) are usually conspicuous, and sessile invertebrates, primarily barnacles (*Chthamalus dalli* and *Balanus glandula*) are found at the higher intertidal zones. Mobile organisms, such as gammarid amphipods (beach hoppers), isopods (sow bugs), and shorecrabs (*Hemigrapsis oregonensis*) are usually found at the lower tidal elevations.

Subtidal/open water habitat occurs immediately adjacent to the North Park Street Code area in the Estuary. Numerous organisms are known to occur within such habitat throughout the San Francisco Bay region.⁵ Benthic invertebrates, including a variety of crustaceans, tube-dwelling polychaetes, and mollusks are likely to occur. In addition to benthic invertebrates, an assortment of fish species is also typically present in nearshore areas. The fish species could include American shad, bat ray, brown rockfish, leopard shark, striped bass, and white croaker.

Pacific herring could occasionally spawn along the project waterfront. This species spawns primarily on vegetation and substrates in intertidal or shallow subtidal waters, primarily between December 1 and March 1. Spawning in San Francisco Bay occurs primarily in the Tiburon Peninsula and Angel Island area,⁶ but herring do spawn periodically in the Oakland Estuary, sometimes in high numbers, including near the Alameda Point.⁷ Pacific herring are of special interest to the CDFG because San Francisco Bay and Tomales Bay support the largest spawning aggregations in California.⁸

⁵ Herbold, B., et al., 1992. *San Francisco Estuary Project: Status and Trends on Aquatic Resources in the San Francisco Estuary*. Prepared under EPA Cooperative Agreement CE-009519-01-1. US Fish and Wildlife Service, Sacramento, California.

⁶ Ibid.

⁷ US Navy and Tetra Tech, Inc., 1997. *Biological Assessment for Disposal and Reuse of Naval Air Station Alameda and Fleet and*

e. Sensitive Natural Communities

Sensitive habitats that may be affected by future development that would occur under buildout of the North Park Street Code are: 1) the open waters of the Estuary; 2) trees that may support raptor nests and/or trees protected under the City of Alameda’s Historic Preservation Ordinance. Waters of the Estuary are subject to Army Corps jurisdiction. Trees that would be protected in the area under the Historic Preservation Ordinance are native live oaks, including the coast live oak.

f. Special-Status Species

For the purpose of this EIR, special-status species are defined as follows:

- Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the Federal Endangered Species Act.
- Species that are listed, or designated as candidates for listing, as rare, threatened, or endangered under the California Endangered Species Act.
- Plant species on List 1A, List 1B, and List 2 in the California Native Plant Society’s (CNPS) Inventory of Rare and Endangered Vascular Plants of California.⁹
- Wildlife species listed by the California Department of Fish and Game (CDFG) as species of special concern, or as fully protected species.
- Species that meet the definition of rare, threatened, or endangered under the California Environmental Quality Act (CEQA). (Under Section 15380 of the CEQA Guidelines, a species not included on any formal list “shall nevertheless be considered to be endangered, rare or threatened if the species can be shown to meet the criteria for listing.”)
- Considered to be a taxon of special concern by local agencies.

The status, habitat requirements and potential for occurrence of these species was gathered through review of the California Natural Diversity Data Base (CNDDB), California Native Plant Society Electronic Inventory, and biologists’ knowledge of special-status species in Alameda County. **Table IV.F-1** lists 15 special-status plant species and 27 special-status animal species known from Alameda County and that potentially occur on or in the vicinity of the North Park Street Code area. The status, habitat requirements and potential for occurrence of these species are summarized in **Table IV.F-1** and are discussed below.

Industrial Supply Center, Alameda Facility and Annex, Alameda, California. September.

⁸ Herbold, B., et al., 1992. *San Francisco Estuary Project: Status and Trends on Aquatic Resources in the San Francisco Estuary.* Prepared under EPA Cooperative Agreement CE-009519-01-1. US Fish and Wildlife Service, Sacramento, California.

⁹ Skinner, M.W. and B.M. Pavlik, 1994. *Inventory of Rare and Endangered Vascular Plants of California.* Special Publication #1, 5th Ed. California Native Plant Society, Sacramento, California.

Special-Status Plants. The CNDDDB records the occurrence of two special-status plant species in the City of Alameda, the robust spineflower (*Chorizanthe robusta* var. *robusta*) and Kellogg’s horkelia (*Horkelia cuneata* ssp. *sericea*). The robust spineflower occurs on sandy soils in coastal dunes and coastal scrub. Kellogg’s horkelia occurs on coastal sandhills and old sand dunes. These two species would not occur in the North Park Street Code area because of the absence of sandy soils and dunes.

Eleven other special-status plant species are listed in the CNPS electronic inventory as occurring in the general vicinity of the North Park Street Code area. They are Contra Costa goldfields (*Lasthenia conjugens*), Santa Cruz tarplant (*Holocarpha macradenia*) alkali milk-vetch (*Astragalus tener* var. *tener*), San Francisco Bay spineflower (*Chorizanthe cuspidata* var. *cuspidata*), Choris’s popcornflower (*Plagiobothrys chorisanthus* var. *chorisanthus*), rayless ragwort (*Senecio aphanactis*), Palmate-bracted bird’s beak (*Cordylanthus palmatus*), Lemmon’s jewelflower (*Caulanthus coulteri* var. *lemomonii*), showy Indian clover (*Trifolium amoenum*), Congdon’s tarplant (*Centromadia parryi* ssp. *congdonii*), and dune gilia (*Gilia capitata* spp. *chamissonis*). These species are listed in **Table IV.F-1** and are not expected to occur within the North Park Street area because of the absence of suitable habitat and the extensive disturbance to the site.

Special-Status Animals. Of the 27 special-status animal species listed in **Table IV.F-1** that occur in the general vicinity of the North Park Street Code area, 19 are considered unlikely to occur or nest on the site because of the absence of suitable habitat and the extensive disturbance. Those species not expected include: Bay checkerspot butterfly, Callippe silverspot butterfly, tidewater goby, California red-legged frog, foothill yellow-legged frog, Alameda whipsnake, western pond turtle, California clapper rail, California black rail, western snowy plover, northern harrier, burrowing owl, salt marsh common yellowthroat, Alameda song sparrow, double-crested cormorant (rookery), Townsend’s western big-eared bat, western mastiff bat, salt marsh harvest mouse, and salt marsh wandering shrew.

An additional seven species may occur occasionally within the North Park Street Code area or in the Estuary, but are unlikely to be affected. These include: California brown pelican, double-crested cormorant, California least tern, Caspian tern, merlin, peregrine falcon, and loggerhead shrike. The cormorant, Caspian tern, California least tern, and California brown pelican would not nest on the site due to lack of appropriate habitat but may forage along the shoreline or in the open water habitat (Estuary) adjacent to the North Park Street Code area; these species could easily avoid in-water construction areas. Three of the species (merlin, peregrine falcon, and loggerhead shrike) could forage occasionally on or over the site, but would be expected to avoid development-related disturbances. The pallid bats may forage over the site and may roost in vacant structures in the North Park Street Code area.

Table IV.F-1: Special-Status Species Occurring or Potentially Occurring in the Vicinity of the North Park Street Code Area

Species	Status (Fed/State/ CNPS)	Habitat	Occurrence at North Park Street Code Area
PLANT SPECIES			

Species	Status (Fed/State/ CNPS)	Habitat	Occurrence at North Park Street CodeArea
Contra Costa Goldfields (<i>Lasthenia conjugens</i>)	FE/SE/1B	Mesic valley and foothill grasslands, vernal pools.	Not expected. No suitable habitat present onsite.
Robust Spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	FE/--/1B	Sandy terraces and bluffs or loose sand.	Not expected.
San Francisco Bay Spineflower (<i>C. cuspidata</i> var. <i>cuspidata</i>)	/--/1B	Sandy soils on terraces and bluffs.	Not expected.
Santa Cruz Tarplant (<i>Holocarpha macradenia</i>)	FPT/SE/1B	Coastal prairie and valley and foothill grassland, in sandy clay soils.	Not expected.
Kellogg's Horkelia (<i>Horkelia cuneata</i> ssp. <i>sericea</i>)	/--/1B	Old dunes, coastal sand hills.	Not expected.
Alkali Milk-Vetch (<i>Astragalus tener</i> var. <i>tener</i>)	--/--/1B	Playas, valley and foothill grasslands (adobe clay), alkaline vernal pools.	Not expected.
Choris's Popcornflower (<i>Plagiobothrys chorisanthus</i> var. <i>chorisanthus</i>)	--/--/1B	Coastal prairie, coastal scrub	Not expected
Rayless Ragwort (<i>Senecio aphanactis</i>)	--/--/2	Alkaline coastal scrub	Not expected
Showy Indian Clover (<i>Trifolium amoenum</i>)	--/--/1B	Valley and foothill grasslands	Not expected
Palmate Bracted Bird's Beak (<i>Cordylanthus palmatus</i>)	--/--/1B	Alkaline grassland	Not expected
Lemmon's Jewelflower (<i>Caulanthus coulteri</i> var. <i>Lemmonii</i>)	--/--/1B	Valley and foothill grasslands	Not expected
Congdon's Tarplant (<i>Centromadia parryi</i> ssp. <i>congdonii</i>)	--/--/1B	Alkaline valley and foothill grasslands	Not expected
Dune Gilia (<i>Gilia capitata</i> ssp. <i>chamissonis</i>)	--/--/1B	Coastal dunes and coastal scrub	Not expected
ANIMALS			
Bay Checkerspot Butterfly (<i>Euphydryas editha bayensis</i>)	FT/--	Native grassland on serpentine outcrops; host plant = dwarf plantain (<i>Plantago erecta</i>)	Not expected. No suitable habitat present onsite.
Callippe Silverspot Butterfly (<i>Speyeria callippe callippe</i>)	FE/--	Northern coastal scrub; host plant = violet (<i>Viola pedunculata</i>)	Not expected. No suitable habitat present onsite.
Tidewater Goby (<i>Eucyclogobius newberryi</i>)	FE/CSC	Brackish water of shallow lagoons and lower stream reaches.	Not expected. No suitable habitat present onsite.
California Red-legged Frog (<i>Rana aurora draytonii</i>)	FT/CSC	Perennial and seasonal ponds, creeks, seeps, and adjacent riparian corridors, grasslands	Not expected. No suitable habitat present onsite.
Foothill Yellow-legged Frog (<i>Rana boylei</i>)	--/CSC	Shallow streams and riffles with rocky substrate	Not expected. No suitable habitat present onsite.
Alameda Whipsnake (<i>Masticophis lateralis euryxanthus</i>)	FT/ST	Chaparral, rock outcrops, and adjacent grassland	Not expected. No suitable habitat present onsite.
Western Pond Turtle (<i>Clemmys marmorata</i>)	--/CSC	Perennial and seasonal ponds and creeks, brackish sloughs	Not expected. No suitable habitat present onsite.

Species	Status (Fed/State/ CNPS)	Habitat	Occurrence at North Park Street CodeArea
California Brown Pelican (<i>Pelecanus occidentalis californicus</i>)	FE/SE	Nests on off-shore islands in southern California; major night roost near NAS Alameda.	No nesting habitat on-site; may forage along shoreline of North Park Street Codearea.
Double-crested Cormorant (rookery site) (<i>Phalacrocorax auritus</i>)	--/CSC	Nests on coastal cliffs, offshore islands and trees at inland sites.	Observed individual birds in area; no nesting habitat on-site; forages along shoreline of North Park Street Codearea.
California Clapper Rail (<i>Rallus longirostris obsoletus</i>)	FE/SE	Tidal salt marshes with tidal sloughs.	Not expected. No suitable habitat present onsite.
California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	--/ST	Salt marshes traversed by tidal sloughs.	Not expected. No suitable habitat present onsite.
Western Snowy Plover (coastal population) (<i>Charadrius alexandrinus nivosus</i>)	FT/CSC	Sandy beaches, alkali flats.	Not expected. No suitable habitat present onsite.
California Least Tern (<i>Sterna antillarum brownii</i>)	FE/SE/SFP	Breeds in colonies on bare flat substrates (i.e., sandy beaches, alkali flats, paved areas).	No nesting habitat on-site; may occasionally forage along shoreline of North Park Street Codearea.
Caspian Tern (<i>Sterna caspia</i>)	--/CSC	Breeds in colonies on coastal and inland islands.	No nesting habitat on-site; may forage along shoreline of North Park Street Codearea.
Northern Harrier (<i>Circus cyanews</i>)	--/CSC	Nests on ground in grasslands and marshes.	Not expected. No suitable habitat present onsite.
Merlin (<i>Falco columbarius</i>)	--/CSC	Winters in Bay area; wide-ranging and forages in open habitats.	Possible occasional visitor.
Peregrine Falcon (<i>Falco peregrinus anatum</i>)	--/SE	Nests on Bay Bridge; forages over surrounding open areas.	Possible occasional visitor.
Burrowing Owl (<i>Athene cunicularia</i>)	--/CSC	Grasslands where California ground squirrels are present.	Not expected.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	--/CSC	Open areas with well spaced perches; nests in shrubs and trees.	Possible occasional visitor.
Salt Marsh Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	--CSC	Salt and freshwater marshes surrounding San Francisco Bay.	Not expected. No suitable habitat present onsite.
Alameda Song Sparrow (<i>Melospiza melodia pusillula</i>)	--/CSC	Salt marshes dominated by pickleweed.	Not expected. No suitable habitat present onsite.
Pallid Bat (<i>Antrozous pallidus</i>)	--/CSC	Roosts in caves, mines, buildings and bridges.	Possible, could roost in old buildings.
Long Eared Myotis Bat (<i>Myotis evotis</i>)	--/CSC	Roosts in caves, mines, buildings and bridges.	Possible, could roost in old buildings.
Fringed Myotis Bat (<i>Myotis thysanodes</i>)	--/CSC	Roosts in caves, mines, buildings and bridges.	Possible, could roost in old buildings.
Long-legged Myotis Bat (<i>Myotis volans</i>)	--/CSC	Roosts in caves, mines, buildings and bridges.	Possible, could roost in old buildings.
Yuma Myotis Bat (<i>Myotis yumanensis</i>)	--/CSC	Roosts in caves, mines, buildings and bridges.	Possible, could roost in old buildings.

Species	Status (Fed/State/ CNPS)	Habitat	Occurrence at North Park Street Code Area
Townsend's Western Big-eared Bat (<i>Corynorhinus townsendii townsendii</i>)	–/CSC	Roosts in mines and buildings.	Not expected.
Western Mastiff Bat (<i>Eumops perotis</i>)	–/CSC	Roosts in crevices in tall cliffs and buildings.	Not expected. North Park Street Code area outside of accepted range.
Salt Marsh Wandering Shrew (<i>Sorex vagrans halicoetes</i>)	–/CSC	Tidal salt marshes of San Francisco Bay.	Not expected. No suitable habitat present onsite.
Salt Marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	FE/SE	Tidal salt marshes of San Francisco Bay.	Not expected. No suitable habitat present onsite.

Status

FE = Federally listed as an endangered species.
FT = Federally listed as a threatened species.
FPT = Proposed for listing federally as a threatened species.
SE = State listed as an endangered species.
ST = State listed as a threatened species.
SFP = State fully protected species.

CSC = California species of special concern.
1B = California Native Plant Society (CNPS) List 1B: species rare and endangered in California and elsewhere.
-- = No listing status.
¹ = ESU refers to Evolutionarily Significant Unit.
² = Winter-run chinook salmon: federal endangered status for the Sacramento River population.

Source: LSA Associates, Inc., 2003.

The following four special-status animal species are either known in the vicinity or could occur in suitable habitats in the North Park Street Code area.

- **California Least Tern.** The California least tern is a federal and State endangered species. The least tern is also a State fully protected species. Least terns feed on fish, and the Estuary open water habitat provides important foraging habitat for least terns nesting on the western portion of Alameda Point. Although a prior study found that the California least tern nests at Alameda Point (about 1½ miles west of the North Park Street Code area), it forages only occasionally in the portion of the Estuary in the vicinity of the North Park Street Code area.¹⁰
- **California Brown Pelican.** The California brown pelican is a federal and State endangered species. The Alameda breakwater (1½ miles south of Estuary) is the largest brown pelican roost in San Francisco Bay and the only known night roost used by brown pelicans in the Bay.^{11,12}

¹⁰ U.S. Fish and Wildlife Service, 1999. Endangered Species Formal Consultation on the Proposed Naval Air Station Alameda/Fleet and Industrial Supply Center Alameda Disposal and Reuse, Alameda County, California. USFWS Reference No. 1-1-98-F-2, written communication. U.S. Department of the Interior, Sacramento Fish & Wildlife Service Office, Sacramento, California. March 22.

¹¹ Ibid.

¹² Jaques-Strong, D., 1994. Brown Pelicans in Northern California and the Importance of the Roost at the Alameda Naval Air Station in *Alameda Naval Air Station's Natural Resources and Base Closure Planning for the Future*. Proceedings of a Scientific Symposium held at the College of Alameda, Alameda, California. The Golden Gate Audubon Society, Berkeley, California. March 12.

Brown pelicans feed on fish, and the Estuary provides foraging habitat for brown pelicans that roost on the breakwater.

- ***Cooper's Hawk***. The Cooper's hawk is a State species of special concern. It has no federal status. The State has concerns about the loss of nesting habitat. The Cooper's hawk preys primarily on medium-sized birds. It nests in trees with dense canopies and has been observed nesting in urban settings.¹³ Cooper's hawk has been observed nesting in the City of Alameda.¹⁴
- ***Pallid Bat***. The pallid bat is a State species of special concern. It is not listed federally or by the State as a threatened or endangered species. The pallid bat lives in deep crevices in rock faces, buildings, or bridges, and hibernates during the winter months. This species feeds primarily on the ground, and commonly preys on crickets, grasshoppers, and beetles.¹⁵ This species could occupy vacant structures found on the North Park Street Code area.

2. IMPACTS AND MITIGATION MEASURES

This section describes the potential impacts that could occur to biological resources as a result of implementation of the Park Street Code. The section begins with a list of criteria of significance, which establish the thresholds that are used to determine whether the North Park Street Code would result in significant environmental impacts. The latter part of this section describes the impacts to biological resources associated with implementation of the Code, and measures to mitigate these impacts.

a. Significance Criteria

The North Park Street Code would cause a potentially significant impact to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies or regulations or by the CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands or waters of the United States, as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological alteration, or other means.

¹³ Palmer, R.S., editor, 1988. *Handbook of North American Birds*: Volume 4, Diurnal Raptors (Part 1). Yale University Press, New Haven and London.

¹⁴ Feeney, Leora, 1999. Wildlife Biologist/Ornithologist, Alameda, California. Personal communication with Don Schmoldt, LSA Associates, Inc. February 25.

¹⁵ Tuttle, M.D., 1988. *America's Neighborhood Bats*. University of Texas Press, Austin, Texas.

- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or substantially impede the use of native wildlife breeding or roosting sites.
- Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance.
- Conflict with an adopted local, regional or state habitat conservation plan.

b. Less-than-Significant Impacts

The following discussion describes less-than-significant impacts to biological resources that could occur as a result of implementation of the Northern Waterfront GPA:

(1) Special-Status Species

No special-status plant species are expected to occur within the North Park Street Code area, due to disturbed site conditions and lack of suitable habitat. Out of the 27 special-status animal species listed by the CNDDB as potentially occurring within or in the vicinity of the North Park Street Code area, 19 species are considered unlikely to occur or nest within the North Park Street Code area due to extensive site disturbance and the lack of suitable habitat. Therefore, it is not anticipated that these species would be adversely affected by implementation of the Code.

An additional seven special-status species (double-crested cormorant, Caspian tern, merlin, peregrine falcon, and loggerhead shrike, California least tern, California brown pelican) may occur within the North Park Street Code area or the vicinity. Although these species may forage within or adjacent to the North Park Street Code area, they would be expected to avoid developed sites and would not be adversely affected by the redevelopment of existing developed sites in the North Park Street Code area.

(2) Riparian Habitat

No riparian habitat exists within the North Park Street Code area. Therefore, implementation of the North Park Street Code would not adversely impact protected riparian habitat.

(3) Habitat Conservation Plan

Biological resources within the North Park Street Code area are not regulated by a local, regional, or State habitat conservation plan. Therefore, implementation of the North Park Street Code would not conflict with an adopted habitat conservation plan or the San Francisco Bay Plan.

c. Significant Impacts

The following discussion describes significant impacts to biological resources that could occur as a result of implementation of the Code:

Impact BIO-1: Renovation and demolition of buildings within the North Park Street Code area may result in the loss of bat roost sites.

Bats potentially roost in vacant or underutilized buildings such as the warehouses found within the North Park Street Code area. Implementation of the following mitigation measure would reduce potential impacts to the bats identified in **Table IV.F-1** to a less-than-significant level.

Mitigation Measure BIO-1: Proponents of each project in the North Park Street Code area shall prepare a preconstruction survey of all buildings scheduled for demolition or renovation shall be conducted no more than 30 days prior to the initiation of demolition or renovation activities. Special attention shall be given to buildings where pallid bats were observed during the earlier survey or where measures to discourage roosting were implemented. If no bats or signs of an active roost are found, no additional measures are required. If a bat roost site is found, then measures shall be implemented to discourage roosting at the site. If a maternity colony of bats is found, the building and the bats shall not be disturbed until the young have dispersed, as determined by a qualified biologist.

Impact BIO-2: Sediment dredging and in-water construction activities in the Estuary could impact fish, aquatic bird species, and other aquatic organisms.

Implementation of the North Park Street Code may result in the creation of a waterfront improvements, docks, and or improvements to existing bulkheads and/or rip rap areas that would require substantial dredging. Mammals and birds that feed on fish, including the California least tern, could be affected by dredging. Dredging could disturb and disperse contaminated materials into the water during the period of active dredging and for a short time thereafter. Sediments in the lagoon could be contaminated with heavy metals (lead, chromium, and zinc), PCBs, organic compounds, chlorinated compounds, or other industrial effluent.

Dredging and in-water construction activities would also increase the turbidity of the water, reducing visibility for the California least tern, California brown pelican, and other species. Increased turbidity also could discourage the tern's prey fish from entering Alaska Basin from nearby San Francisco Bay, thereby decreasing the supply of available fish during dredging and construction operations. A reduction in young fish produced during the spawning season could result in breeding failure for the tern due to a limited food supply for tern chicks and fledglings. Increased turbidity from dredging and in-water construction activities would be localized and of limited duration. The magnitude of the turbidity would depend in part on the number and type of dredges working at a given time, their locations, and measures implemented to reduce turbidity. Implementation of the following mitigation measure would reduce this impact to a less-than-significant level:

Mitigation Measure BIO-2: All dredging and in-water construction activities shall be consistent with the standards and procedures set forth in the Long Term Management Strategy, a program developed by the Bay Conservation and Development Commission (BCDC), the Regional Water Quality Control Board (RWQCB), the U.S. Environmental

Protection Agency (EPA), and other agencies, to guide dredging and the disposal of dredge materials in an environmentally sound manner.